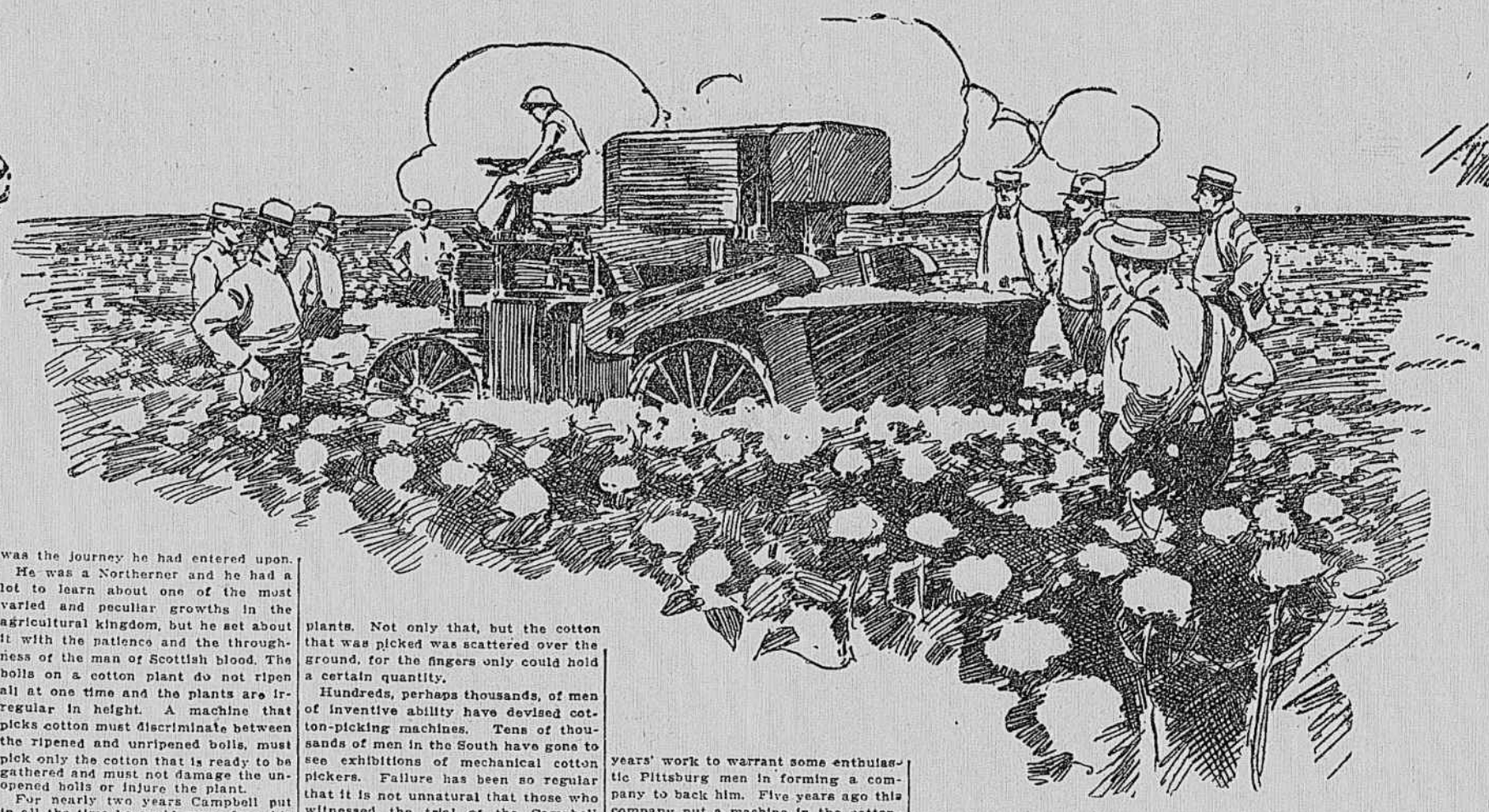
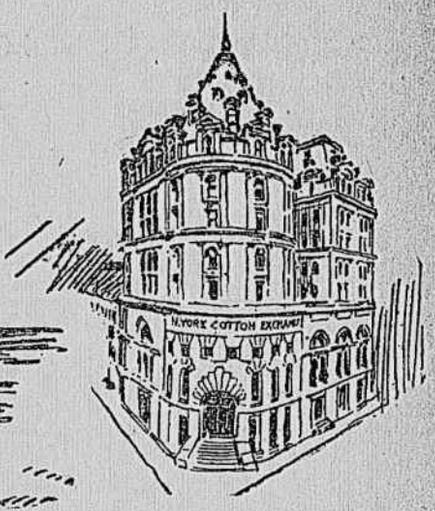
REAL ROMANCES OF THE BUSINESS WORLD

IT HAPPENED IN WALL STREET





BY RICHARD SPILLANE.

If developments in the Southland in the next few years are as many intelligent persons expect, the encyclopedists of the future will rank Angus Campbell along with Whitney, Bessemer and McCormick. In the case of Whitney, the invention of the gin marked the beginning of the greatness of cotton. The dawn of the age of steel may be credited to Bessemer. McCormick ushered in the most revolutionary advance in agriculture the world has ever known. Now comes Campbell with a cotton harvester that may do for the South's great staple what the McCormick reaper has done for wheat.

About none of the products of the soil is the waste more pronounced than in cotton. The crop is gathered today practically as it was a century ago. It is at the same time a blessing and a bane, for while it is the one great money product of the South, it brings disorganization to the labor market in the cotton belt. Mills and factories suffer when cotton is to be picked, for labor flocks to the cotton fields. Cotton brings cash—more of it than other employment open to unskilled labor—and the negro of the South has little or no thought of other work when cotton is ripe or until the money he earns in the cotton patch is gone.

Nearly a quarter of a century ago Angus Campbell went to Texas on a visit to a relative. He was a patternmaker in Chicago, and knew nothing of cotton and its problems, but as he journeyed through the country he saw and heard enough to set him thinking. The method of cotton picking seemed to him to be crude and out of reason in an age of machinery and wonderful improvement. It is characteristic of some men that where they see waste they want to eliminate it. Campbell, as he rode along the highways or walked through the cotton fields, watched the negro men and women at work, and wondered what sort of a machine would perform the task with higher skill than human hands. For several years he had been making patterns of labor-saving devices, so it was not strange the cotton situation appealed to him; but he had no idea then how hard was the puzzle he had to solve or how long was the journey he had entered upon.

He was a Northerner and he had a lot to learn about one of the most varied and peculiar growths in the agricultural kingdom, but he set about it with the patience and the thoroughness of the man of Scottish blood. The bolls on a cotton plant do not ripen all at one time and the plants are irregular in height. A machine that picks cotton must discriminate between the ripened and unripened bolls, must pick only the cotton that is ready to be gathered and must not damage the unopened bolls or injure the plant.

For nearly two years Campbell put in all the time he could spare from his regular employment in Chicago on the building of a cotton picker, and in 1889 he made a second trip to Texas. On a plantation near Dallas his first machine had a trial. There was nothing particularly elaborate about it. There was a horizontal cylinder that stretched between a pair of wheels. In the cylinder were set a lot of wooden fingers and these fingers were coated with bristles. As a mule dragged the affair along the cylinder revolved and the bristles caught hold of the ripe cotton.

There was no doubt in the minds of those who saw the trial in 1889 that Campbell's picker would pick cotton. It did more than that. The bristly wooden fingers tore out the cotton, cut into unripened bolls and damaged the plants. Not only that, but the cotton that was picked was scattered over the ground, for the fingers only could hold a certain quantity.

Hundreds, perhaps thousands, of men of inventive ability have devised cotton-picking machines. Tens of thousands of men in the South have gone to see exhibitions of mechanical cotton pickers. Failure has been so regular that it is not unnatural that those who witnessed the trial of the Campbell picker of 1889 shook their heads or smiled. The Campbell machine was a failure. There was no doubt about that, but it had in it the germ of the idea out of which success was to be achieved.

Mr. Campbell went north disappointed, but not dispirited. One year later he was back in Texas with a new-fangled machine. This time he had two cylinders instead of one, and they stood upright. They were intended to pass on either side of the plants and the bristle fingers, reaching out from them, were expected to take hold of the cotton. In setting the cylinders upright Mr. Campbell had struck the right principle, but he had made no progress in the matter of the fingers. They caught the cotton fibre and drew out the lint and seed all right, but as before they soon had more than they could handle, got clogged, and, after that, much of the cotton fell to the ground. And, as before, the whirling fingers injured the unopened bolls and the plant proper.

Once more Mr. Campbell had to go north chagrined and decidedly poorer than he had left there. Once more he set to work to construct a machine that would overcome the obstacles he had encountered. Next year he was back hopeful, if not sanguine, only to have the same experience. Year after year he went south and had to return repulsed. It got almost to be a joke to some people. It would not have been so bitter to Campbell had it not been that trivial things at times set him back a year. Machine shops are not plentiful in the cotton belt. Sometimes, when something went wrong with his machine or he might, by a slight alteration, have worked out a new idea, he could do nothing, for there was no place nearby where repairs or changes could be made.

The machine had been made in the North and had to be sent back to the North. It was nerve-recking to have to delay a year on that account, but there was a greater hardship that had to be met. Nearly every inventor encounters it. Machines cost money—lots of it. Those that fail—and 99 per cent. of those turned out for experimental purposes do—go to the scrap heap. Campbell, who had little more than his earnings, exhausted his money early, and each year had to struggle to get enough together to make such improvements as he had in mind and cover the cost of the next trial. Each year, as he found first this and then that change necessary in his machine, a variety of alterations suggested themselves to him. Some he was able to introduce. Some he could not, because he lacked the money.

For a good many years he clung to the wooden finger, with the bristles. He believed in it fully, having an idea that the trouble was in its length or in the kind of bristle with which it was coated. He tried various lengths and various diameters of the wooden fingers and various kinds of bristles, some of wire and some from the hog. It was a long time before he solved this problem, and when he did he had made a mighty stride. Instead of the wooden fingers he made a steel one. Instead of bristles, it had indented teeth along one portion of its length. Otherwise it was smooth. And instead of having the steel fingers set solidly in the upright cylinders he had them turn as well as the cylinders.

For more than a decade Mr. Campbell figured on a machine that would be drawn by mules or oxen. He endeavored to make it light, but this was difficult. Then there was another trouble. If the power came from the wheels the operation of the machine depended on the gait at which the mules or oxen moved. When the driver lashed the animals they sprang forward and the machine worked fast. When they lagged it slowed. If they halted or the wheels struck it stopped. But it was not possible to make the machine light enough to have one mule draw it and its carriage. A durable machine was so heavy that it required from four to six mules or oxen to draw it through the fields if the land was soft, and when the mules or oxen got through trampling on the cotton there was not enough of it left for the cotton-pick'ng machine to pick.

With the incoming of the automobile Mr. Campbell saw his hope. He realized at once that the gasoline engine was the solution of the power question, and applied himself to rigging up a new-fangled machine that bore some resemblance to an automobile. Its first trial could not be classed as altogether a success, for a despised mule had to be requisitioned to help it out.

Year after year Mr. Campbell struggled along, overcoming one obstacle only to encounter another. He had made enough progress after ten or twelve years' work to warrant some enthusiastic Pittsburg men in forming a company to back him. Five years ago this company put a machine in the cotton-field and then the company failed. There was a reorganization, but there was not enough money back of it, and it soon was in a bad way and practically lapsed.

Late in 1908 Mr. Campbell came to New York to see Theodore H. Price, one of the most prominet men in the cotton market. He told him the cotton picker was perfected. Mr. Price had heard this story before. He had heard it from several other inventors. At various times he had put money into financing inventors.

He was skeptical. Once he had gone to see a trial of the Campbell machine, the ponderous affair that would pick cotton, only the oxen that drew it trampled nearly all the cotton before the picker got to it. Mr. Campbell said his machine was at Vernon, Tex., and if Mr. Price would accompany him there he would see that the end so long sought had been attained at last. Mr. Price was polite, but said he had so much business he could not spare the time. He had given so much attention in former years to cotton-picking devices that he did not feel like wasting any more.

Mr. Campbell asked him to send a man to Texas to see the machine and report as to its work. Mr. Price said he did not think much of the idea. It would be an expenditure without promise of much result. Mr. Campbell said he had $200. That practically was all the money he had in the world. If Mr. Price would send an expert to Texas to examine the machine in operation Mr. Campbell would pay the man's expenses out of the $200. This made Mr. Price start.

"Any man who has faith enough in his machine to put his last $200 to such a test," said Mr. Price, "certainly is worth that much for a chance on my part. I'll send a man and I'll pay the expense."

He sent an expert, and the report the man made was so glowing that Mr. Price got busy at once. The report declared that the machine the cotton world had sought so long had arrived.

It was not long after this report was received that Mr. Price invited a small party of distinguished men to accompany him to Texas to examine the machine at work. One of the party was a former president of the New England Cotton Spinners' Association. Another was connected with the Carnegie Technical School of Pittsburg. Another was the American representative of a big English cotton house.

They went to Vernon and traveled out to the plantation on which the test was to be made. Mr. Campbell, outwardly serene and confident, but probably a bit excited, stood by the machine which was to make or break him. When the visitors had taken positions of vantage from which to view the progress of the machine along the cotton row, the word was given to start.

But the machine would not budge. Wheels were turned and geer was adjusted, but not an inch would the big machine move.

It was a blistering hot day. Mr. Campbell, working as he never had worked before, did his best to get the big vehicle started, but something was wrong with the locomotive end of the affair. The gentlemen invited by Mr. Price only had a limited amount of belief in the machine to begin with. Some of them, in fact, had none at all. This development and the broiling sun were not conducive to improving their spirits, but they were too well bred to express an adverse opinion under such circumstances. They stood and waited and suffered. And Mr. Campbell, who felt that if those men left without seeing the machine work it would mean ruin for him, toiled with the machinery until he was dripping wet and almost exhausted. He labored for half an hour, and then suddenly the seat of trouble was located, the wheels began to revolve and the big machine started.

It was a relief to all to get that much action. Anything to lighten the tension and divert the mind from the heat. But within a few minutes those calm, conservative men from the North had forgotten the heat, had forgotten everything but the machine.

It had gone along down the field following the furrows and had picked cotton as cotton never had been picked by machine before. The ripened cotton had been picked seed and all. The unopened bolls had not been damaged in the slightest. The plant itself had not been bruised a particle. The machine had operated with almost human intelligence. And the secret of it all was in that steel finger, with the indented teeth. The cotton caught on the indentations, but the smooth, rounded surface brushed over the leaves, the unripe bolls and the stalk without affecting them. The cotton that was picked was taken from the revolving fingers and carried through channels on either side of the vehicle to baskets hung in the rear. And the machine did the work of fifty negro pickers. It meant an industrial revolution in the cotton world.

When the test was ended the men flocked around Mr. Campbell and showered congratulations upon him. Some of them were so enthusiastic that Mr. Price called them aside.

"Go easy," he suggested, "I may have to do some business with this man later on, and I do not want it made too hard."

But Angus Campbell did a thing that few men do. In the hour of his triumph he turned to Mr. Price and said: "There's the machine. It's yours. Whatever you think is fair will suit me."

The world has an idea that inventors get little out of what they create. The world has an idea, too, about Wall Street that is not flattering to the men of that district. There is reason for the belief, but sometimes the unusual happens in Wall Street.

If the cotton picker proves to be the great success those who know it best predict Angus Campbell not only will be famous, but very rich. Not only that, but the men in Pittsburg who backed him for a time and then gave up the job will have no reason to regret, for they, too, have been provided for.

Chase City Social News

[Special to The Times-Dispatch.]

Chase City, Va., April 29.—J. Rowland Wildman, of Chapel Hill, who has been visiting his brother, W. D. Wildman, returned to his home Sunday.

Miss Flossie Gallyon, who has been visiting friends in Clarksville, returned to her home here Sunday.

Miss Mary Hardy is visiting Mrs. W. C. Steindorf, in Stems, N. C.

Mr. and Mrs. Howell, of Fort Mitchell, were in town this week.

Mrs. H. H. Farrell is visiting her mother, Mrs. Dora Smith, in Danville.

Mrs. J. L. Price, who has been visiting relatives in Ashland, returned here Saturday.

Miss Pearl Moody spent Sunday with friends in Skipwith.

R. M. Jeffreys and R. M. Hester spent several days in South Boston this week.

Mr. and Mrs. C. W. Gregory spent Sunday in Skipwith with Mrs. Will Jeter.

Hugh Goode, Frank Roberts and Phillips spent Sunday in Skipwith.

Mr. and Mrs. Tinder, of Richmond, visited Mrs. G. P. Wood here this week.

Misses Sallie Booth and Winnifred Hutcheson spent several days in Drakes Branch this week.

J. A. Robertson spent some time in Richmond this week.

R. Sidney Broocks, who has been visiting in Williamsburg, returned Tuesday.

Miss Elizabeth Boyd Roberts, who has been in Richmond, returned Tuesday.

Miss McMillan, who has been teaching music, returned to her home here Monday.

R. W. Patillo was out of town a few days this week.

Mrs. J. S. Hutcheson visited friends in Drakes Branch this week.

Rev. L. T. Williams, of Richmond, preached the Odd-Fellows' annual sermon here Wednesday night.

Mrs. Womack and daughters, of Richmond, are visiting Mr. and Mrs. Robbins, on Marshall Street.